IFPS Job Sheet No. 5

Advanced Editing in the Spatial Editor

Objective — This job sheet will familiarize you with defining areas in which edits can be made.

Define an Edit Area by hand

1. Make sure that the current edit area mode is set to Replace (=).
2. Select the Select Points tool.
3. Move the cursor into the Spatial Editor.
4. Press MB1 and drag the cursor to outline an area with the mouse. You should see a white outline that defines the edge of your area.
5. Release MB1. You should see the area filled with a white shaded pattern.

Erase an Edit Area

1. Move the cursor near any edit area and press MB2.
2. With MB2 pressed, drag another outline to define a new area that partially intersects with the first area
3. Release the mouse and observe that the intersected area is removed from the edit area.

Clear an Edit Area

1. Make sure there is an edit area displayed in the Spatial Editor
2. Using MB1 click on the "C" button.

Select Homogenous Edit Area based on Value

This function allows you to select an edit area based on the value of the selected point and the value of the points surrounding it.

1. Clear the edit area as you did in the previous exercise.
2. Click MB1 on one of the grids in the Grid Manager to display it in the Spatial Editor.
3. Make that grid editable by selecting the grid's legend in the Spatial Editor with MB2. This legend is located at the bottom of the Spatial Editor.
4. Move the mouse cursor to middle of the Spatial Editor display and MB3 press and select Select Homogeneous Area

You should see a new edit area that identifies those grid points whose values are within the fuzz value of the point you selected. For example, if the fuzz value is 3, and you selected a grid point with the value 10, all the points with value between 7 and 13 and that are also touching become selected.

5. In the button bar, select the icon labelled with the big "E". This is the Edit Actions Dialog.
6. From this dialog, select Fuzz Value
7. Change the Fuzz Value so that it is two to three times larger than its current value
8. Select OK in the Fuzz Value dialog.
9. Repeat steps 1-4 above, and note that the edit area is larger, since the fuzz value is now larger.

Saving Edit Areas as QuickSets

1. Define an edit area as you did in any previous exercise.
2. Find the button labeled "Q" in the edit area buttons and click with MB1.
3. Move the mouse cursor over one of the numbered buttons (1-4) and with MB1 click any one of them.

Now your edit area is saved under that particular slot and can be recalled at any time.

Loading a QuickSet

1. Clear the edit area, if there is one currently displayed in the Spatial Editor.
2. Find the same button under which you saved the QuickSet in the previous exercise.
3. Click MB1 on this button.

Saving Named Edit Areas

There are some edit areas that you will want to save permanently as named sets rather then temporarily as QuickSets.

1.. Define an edit area as you did on any of the previous exercises.
2. From the Query Dialog main menu select **Save/Delete -> Edit Area**.
3. In the box labeled "Identifier", type in a unique name.
4. Select "Save" and your edit area will be saved in the database

Loading Named Edit Areas

Once you have saved an edit area as a named set, you mayo load it as the current edit area.

1. Select the Clear button to clear the Spatial Editor of any current edit areas.
2. Select the button labelled "?".
3. Once the Query Dialog appears, select a named edit area from the far left column.
4. Select "Submit".

Clear a Loaded Edit Area

1. Select the “C” button located to the left of the QuickSet area on the Tool Bar. This will clear any loaded Edit Areas.

There are many more tools available from the Edit Actions menu. These edit tools always operate over the currently selected edit area. To use them, click on the Button Bar button labeled "E" . The Edit Action dialog menu will display a list of tools that operate on the currently editable weather element. Selecting one of these tools will perform that operation over the edit area that you have selected

Edit Action PickUp Value for Wind

1. Select **Edit Mode** for the **Wind** Element by clicking **MB2** on the **Wind Legend**.
2. **Define an Edit Area** by hand.
3. Select the **Edit Action button** labeled **E** from the **Tool Bar**.
4. Once the Edit Action dialog box appears, select **PickUp Value.** A dialog box will appear with both a wind speed and direction scales.
5. Select a **wind speed** by clicking **MB2**on the **speed scale**.
6. Select a **wind direction** by **pressing and dragging MB1** on the **wind vector**.
7. Select **Assign Value** from the **Edit Action dialog box**. The wind field in the edit area will be changed to the values you selected.

Edit Action PickUp Value for Weather

1. Select **Edit Mode** for the **Weather** Element by clicking the **middle mouse button** on the **Weather Legend**.
2. **Define an Edit Area** by hand or some other method.
3. Select the **Edit Action button** labeled **E** from the **Tool Bar**.
4. Once the Edit Action dialog box appears, select **PickUp Value.** A dialog box will appear with vertical scale.
5. Select **Other...** from the top of the dialog box. Another dialog box will appear with

several pull-down menu options.
6. Click on the **top pull-down menu** and **select** the **weather type** of interest from the list.
7. **Repeat step 6** for the other pull-down menus to select the weather intensity, obstruction to visibility, and visibility in miles.
8. Select **Set** and then **Dismiss**.
9. Select **Assign Value** from the **Edit Action dialog box**. The weather field in the edit area will be changed to the values you selected.

Edit Area Queries

Defining the edit area for one weather element based on data values of another weather element makes it easier to keep the weather element values consistent. For example, you may want to select all of the areas where it is raining and then assign 100% cloud cover to those points.

Simple Query

1. Set up the Spatial Editor display so that a temperature grid is displayed.
2. Carefully examine the range of values on this grid.
3. Select the Query button that looks like the figure at the right.
4. When the Query Dialog box appears, select "T" from the column labeled Weather Elements.
5. Next, from the operators columns, select > (greater than).
6. Now, select a temperature value (e.g., 70) using the number keys. Make sure that you have selected a value such that there are grid values that are greater than the value you typed in.
7. Finally, select the "Submit" button, which can be found at the bottom of the dialog.

When you submit your query, the GFE calculates all of the points that satisfy the expression. You should see one or more edit areas defined on the Spatial Editor.

A More Complex Query

1. Clear the current edit area by selecting the clear button labeled "C".
2. With temperature still loaded, select the query button labeled "?", if the query dialog is not already visible.
3. Select "T" under the Weather Elements column.
4. Select ">" from the Operators column.
5. Type in a value (e.g., 70).
6. From the operator column located to the left of the Parms column, select * (intersect).
7. Select "T" again under the Parms column.

8. Select "<"from the Operators column.
9. Type in a different value that is higher than the previous value (e.g., 90). The query expression located near the bottom of the dialog should look like: "T > 70 * T < 90".
10. Finally select the "Submit" button. This time all of the grid points whose value is between 70 and 90 should be selected.